

L 08069-67 EWP(e)/EWT(m)/EWP(t)/ETI IJP(c) JD/JG/AT/WH/JH
ACC NR: AP6034242 (N) SOURCE CODE: UR/0120/66/000/005/0220/0221

AUTHOR: Violin, E. Ye.; Kholuyanov, G. F. 61
B

ORG: Leningrad Electrotechnical Institute (Leningradskiy elektrotekhnicheskiy institut)

TITLE: Low-voltage digital indicators using silicon carbide 27 27

SOURCE: Pribory i tekhnika eksperimenta, no. 5, 1966, 220-221

TOPIC TAGS: photoluminescence, silicon carbide, data readout

ABSTRACT: A multisectional low-voltage digital display unit is described whose operation is based on electroluminescent hole-electron diffusion in n-type silicon carbide treated with nitrogen and diffused with boron or aluminum and boron. The radiating element of the unit (see Fig. 1) consists of a basic n-type silicon carbide chip

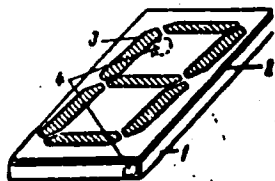


Fig. 1. Radiating element

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(1) about 0.2 mm thick with a fused-on layer of p-type silicon carbide (2) 1—2 μ thick. An electrode (3) consisting of 7 equal-area sections is deposited on the n-type layer through a mask. Each of the sections is connected to a separate input lead. Two fused contacts (4) supply negative bias to the basic chip. The radiating element is placed in a lens (see Fig. 2) to form a display pattern approximately 10 x 6 mm in area. The unit has an input threshold voltage of about 2 v. A junction current of

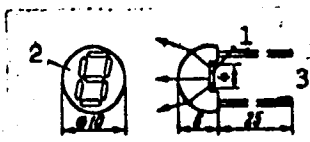


Fig. 2. Digital display unit

1 - Radiating element; 2 - lens; 3 - input leads to radiating elements.

about 5 mamp corresponds to an input voltage of not more than 3 v and an output brightness of 20—25 nit. The maximum operating temperature of the device is 70C, maximum reverse voltage is 15—20 v, and maximum power dissipation, 20—25 mw. Orig. art. has: 4 figures.

SUB CODE: 09/ SUBM DATE: 13Nov65/ ORIG REF: 002/ ATD PRESS: 5102

Cord

2/2

ACC NR: AP6036373

SOURCE CODE: UR/0109/66/011/011/2034/2038

AUTHOR: Violina, G. N.; Kholuyanov, G. F.

ORG: Leningrad Electrotechnical Institute im. V. I. Ul'yanov (Lenin) (Leningradskiy elektrotechnicheskiy institut)

TITLE: Photoconductivity and negative resistance of SiC p-n junctions

SOURCE: Radiotekhnika i elektronika, v. 11, no. 11, 1966, 2034-2038

TOPIC TAGS: silicon carbide, boron, photoconductivity, photosensitivity, PN JUNCTION

ABSTRACT: Photoconductivity (τ) and negative resistance of p- π -n type structures are discussed. These structures are obtained by diffusing boron on a base of high-resistance SiC at 293—800K. Photosensitivity caused by τ of the samples proved to be 10^3 — 10^4 greater than that achieved under photodiode conditions. The maximum τ is found within the intrinsic region. In the dark the volt-ampere curve from $\sim 2\gamma$ up to the region of negative resistance was $I \sim V^m$, where $m \geq 2$. The nature of these currents as well as that of volt-ampere curve hysteresis were disputed. The sector with negative resistance is caused by the formation in the π -region of bipolar currents limited by the space charge. Under intensive bias lighting, the structure is transferred at the expense increasing the minority carrier lifetime from the space charge regime to the structure with a predominance of diffusion currents. Orig. art. has: 5 figures and 1 formula

SUB CODE: 20/ SUBM DATE: 09Jun65/ ORIG REF: 005/ OTH REF: 007
Col 1/1

ACC NR: AP6036998

(A,N)

SOURCE CODE: UR/0181/66/003/011/3395/3397

AUTHOR: Violin, E. Ye.; Kholuyanov, G. F.

ORG: Leningrad Electrotechnical Institute im. V. I. Ul'yanov-Lenin (Leningradskiy elektrotekhnicheskiy institut)

TITLE: Extraction of carriers by the p-n junction field and mechanism of electroluminescence of silicon carbide

SOURCE: Fizika tverdogo tela, v. 8, no. 11, 1966, 3395-3397

TOPIC TAGS: semiconductor carrier, pn junction, silicon carbide, electron recombination

ABSTRACT: The authors investigated the relaxation of emission of electroluminescent diodes obtained by joint diffusion of boron and aluminum in n-SiC doped with nitrogen ($\sim 10^{18} \text{ cm}^{-3}$) at identical temperatures (1900C), times (40 min), and concentrations of the diffusing atoms. Electroluminescent diodes were grouped in two classes, depending on whether the afterglow time is commensurate with (A) or much smaller than (B) the electroluminescence buildup time. The efficiency of the latter type is 5 - 10 times smaller than that of the former type. Application of a negative bias voltage reduced the aftereffect of type A to a value similar to that of type B, without a change in the electroluminescence buildup time. A positive bias, on the other hand, increased the electroluminescence intensity in the afterglow insignificantly. Another peculiarity of these diodes is that the electroluminescence buildup and damping time

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of both types do not fit a single hyperbolic or exponential dependence, and must be approximated by two exponentials. The experimental data can be explained by assuming that the recombination of the nonequilibrium electrons and holes occurs essentially in the space-charge region of the p-n junctions, where they can be captured by various traps. The authors thank M. B. Reyfman, V. I. Ionov, and Ye. A. Yudin for supplying the crystals, and O. A. Fayans for help with the experiments. Orig. art. has: 2 figures and 1 formula.

SUB CODE: 20/ SUBM DATE: 20May66/ ORIG REF: 003

Card 2/2

KHOLUVSKAYA, A. I. Cand. Biolog. Sci.

"Dissertation: "Variation of Nucleus (Cell) Dimensions in the Embryo-
genesis of Triton Taeniatus L." Moscow State Pedagogical Inst imeni
V. I. Lenin, 27 Jun 47.

SO: Vechernyaya Moskva, Jun, 1947 (Project #17836)

KHOLUYSKIY, S.A.

Studying fundamentals of cattle breeding in rural secondary schools. Politekh.obuch. no.12:37-40 D '58. (MIRA 11:12)

1. Yermishinskaya srednyaya shkola Ryzanskoy oblasti.
(Yermish' District--Stock and stockbreeding--Study and teaching)

L 45854-66

ACC NR: AP6020359

(A)

SOURCE CODE: UR/0104/66/000/003/0083/0084

AUTHOR: Kholyan, A. M. (Engineer); Elyukin, S. B. (Engineer); Onuchin, V. Ya. (Engineer); Kravets, M. A. (Engineer)

ORG: None

TITLE: Application of computer for designing cable raceways

SOURCE: Elektricheskiye stantsii, no. 3, 1966, 83-84

TOPIC TAGS: ^{circuit design, computer calculation,} electric engineering, electric cable, electric network, electronic computer / M-20 electronic computer

ABSTRACT: Application of electronic computers to wiring design and circuit calculations is discussed in connection with a paper published by the Ural Branch of the Teploelektroproyekt Institute. The paper in question deals with design considerations and economics of wiring raceway systems used at electric power plants for auxiliary power circuits. An electronic computer of M-20 type was used by the Institute for circuit and conductor calculations on the basis of layouts providing information on cable raceways, cable crossings, junctions, riser columns, interconnections, etc. Numbers were assigned to each raceway, column, connection and special tabular graphs were prepared. The mathematical aspect of calculations is discussed by the authors and some examples of using graphs are explained. Various versions for economical cable laying (shortest distance, cable weight) are briefly examined. The results obtained in cable raceway calculations include the cable length, panel number, consumer number and interconnection numbers.

SUB CODE: 09/ SUBM DATE: None

1.3
Card 1/1

UDC: 621.315.29

KHOLYAPIN, V.G. (Balashov).

Rotary commutator for demonstrations. Politekh. obuch. no. 6:51-54
Je '58. (MIRA 11:6)

1. Pedinstitut. (Oscillography) (Commutation (Electricity))

POKROVSKIY, A.A., kand.pedagog.nauk, starshiy nauchnyy sotrudnik;
 BUROV, V.A., uchitel'; GLAZYRIN, A.I., starshiy nauchnyy sotrudnik,
 pensioner; DUBOV, A.G., starshiy nauchnyy sotrudnik; ZVORYKIN, B.S.,
 nauchnyy sotrudnik; KAMENETSKIY, S.Ye., uchitel'; KOSTIN, G.N., pre-
 podavatel'; MIRGORODSKIY, B.Yu., uchitel'; OREKHOV, V.P., prepoda-
 vatel'; ORLOV, P.P., prepodavatel'; RAZUMOVSKIY, V.G., aspirant;
 RUMYANTSEV, I.M., aspirant; TEREENT'YEV, M.M., prepodavatel';
 KHOLYAPIN, V.G., prepodavatel'; SHAKHMAYEV, N.M., nauchnyy sotrudnik,
 uchitel'; VOYTENKO, I.A., uchitel' sredney shkoly, pensioner; STA-
 ROSTIN, I.I., prepodavatel'; MOGILKO, A.D., aspirant; SEMAKIN, N.K.;
 KOPTIKOVA, L.A., red.; LAUT, V.G., tekhn.red.

[New school equipment for use in physics and astronomy] Novye
 shkol'nye pribory po fizike i astronomii. Pod red. A.A.Pokrovskogo.
 Moskva, Izd-vo Akad.pedagog.nauk RSFSR, 1959. 161 p. (MIRA 12:11)

1. Akademiya pedagogicheskikh nauk RSFSR, Moscow. Institut metodov
 obucheniya. 2. Laboratoriya metodiki fiziki Instituta metodov obuche-
 niya Akademii pedagogicheskikh nauk RSFSR (for Pokrovskiy). 3. Sred-
 nyaya zheleznodorozhnaya shkola st.Kratovo, Moskovskoy oblasti (for
 Burov). 4. Institut metodov obucheniya Akademii pedagogicheskikh nauk
 (for Glazyrin, Dubov, Razumovskiy, Rumyantsev).

(Continued on next card)

· POKROVSKIY, A.A.---(continued) Card 2.

5. Institut metodov obucheniya Akademii pedagog.nauk; srednyaya shkola No.315 Moskv (for Zvorykin). 6. Srednyaya shkola No.212 Moskv (for Kamenetskiy). 7. Krasnodarskiy pedinstitut (for Kostin). 8. Srednyaya shkola No.18 g.Sumy (for Mirgorodskiy); 9. Ryazanskiy pedinstitut (for Orekhov). 10. Stalingradskiy pedinstitut (for Orlov). 11. Moskovskiy gorodskoy pedinstitut; srednyaya shkola No.443 Moskv (for Terent'yev). 12. Balashevskiy pedinstitut (for Kholyapin). 13. Institut metodov obucheniya Akademii pedagog.nauk; srednyaya shkola No.215 Moskv (for Shakhmayev). 14. Moskovskiy pedinstitut im. V.I.Lenina (for Starostin). 15. Pedinstitut im. V.I.Lenina v Moskv (for Mogilko). 16. Zaveduyushchiy narodnoy astronomicheskoy observatoriyey Dvortsa kul'tury Moskovskogo avtozavoda im. Likhacheva (for Semakin).

(Physical instruments)

KHOLYAPIN, V.G.

A board for the construction of the simplest radio receivers. Politekh.
obuch. no.2:51-53 F '59. (MIRA 12:3)

1. Pedagogicheskiy institut, g. Balashov.
(Radio--Receivers and reception)

L 27844-66 EWT(c)

ACC NR: AP6001055

SOURCE CODE: UR/0107/65/000/001/0030/0031

AUTHOR: Amosov, A. (Engr.); Kholyava, V. (Engr.)

ORG: none

TITLE: 'Almaz' radio receiver

SOURCE: Radio, no.1, 1965, 30-31 and inside of rear cover

TOPIC TAGS: radio receiver, transistorized circuit, circuit design

ABSTRACT: Detailed description, characteristics, circuit diagrams and photograph of a 134 x 83 x 34 mm transistor radio (seven transistors, one crystal diode) for medium- and long-wave reception are given. The apparatus was manufactured by the Leningradskiy sovmarkhoz. Orig. art. has: 4 figures, 2 tables. [JPRS]

SUB CODE: 17 / SUBM DATE: none

Card 1/1 TS

L 15572-66 EWT(d)/FSS-2

ACC NR: AP6008229

SOURCE CODE: UR/0107/65/000/004/0034/0036

AUTHOR: Amosov, A. (Engineer); Khol'yava, V. (Engineer); Cherankov, Yu. (Engineer); Mogil'nikov, I.

ORG: none

39

TITLE: Transistorized radio receiver 'Neva-2' 4

B

SOURCE: Radio, no. 4, 1965, 34-36 4

TOPIC TAGS: radio receiver, transistorized circuit, circuit design, radio engineering

ABSTRACT: The article gives an overall technical description of the "Neva-2" model. It is first compared to the previous "Neva" model which it excels in terms of electro-acoustic performance and operating reliability. The "Neva-2" is designed on the super-heterodyne principle with a set of transistors and one crystal diode. It operates on battery supply and its frequency range extends over long waves and medium waves. The basic components of this receiver are a frequency converter, a two-stage intermediate-frequency amplifier, a sharp-selection filter for adjacent-channel selectivity, a detector, automatic gain control and a two-stage low-frequency amplifier. Capacitors are used for neutralization and interstage coupling, except for the second stage of the l-f amplifier where negative feedback is effected through a resistance-capacitance circuit for the purpose of reducing non-linear distortions, and

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ACC NR: AP6008229

for the frequency converter which has an inductive feedback. The receiver delivers nominally 50 mw power, the maximum non-linear audio distortion is 12%, it operates satisfactorily down to 7.2 V but will still work at 5.6 V battery supply. The dimensions of the receiver are 150 x 95 x 35 mm, its weight is 450 grams. The built-in magnetic antenna is mounted to the printed-circuit chassis. The loudspeaker is mounted under the top of the case. Station tuning is done with a variable capacitor rotated through a 1:6 reduction gear. The overall complete circuit diagram of the receiver is shown, also the wiring diagram and transistor-amplifier details. Orig. art. has: 4 figures and 2 tables. [JFRS]

SUB CODE: 09 / SUBM DATE: none

Card 2/2 mc

Khol'yavenko, K. M.

USSR/ Chemistry - Inorganic chemistry

Card 1/1 Pub. 116 - 6/29

Authors : Gorokhovatskiy, Ya. B.; Rubanik, M. Ya.; Belaya, A. A.; Popova, Ye. N.;
Khol'yavenko, K. M.; and Shcherbakova, G. D.

Title : Kinetics of catalytic oxidation of ethylene into ethylene oxide in a zone
exceeding the maximum limit of spontaneous combustion

Periodical : Ukr. khim. zhur. 21/6, 714-720, Dec 1955

Abstract : The relation between the rate of reaction and the ethylene and oxygen con-
tents in the basic reaction mixture was investigated in a zone exceeding the
maximum limit of spontaneous combustion. It was established that the yield
does not depend upon the ethylene content in the mixture but increases with
the increase in the oxygen content of the mixture. The equation governing
the kinetics of oxidation of ethylene over a silver catalyst (in the case of
rich ethylene mixtures) is presented. The heat of activation for the summary
ethylene oxidation process was established at 18 kcal/mol. Ten references:
3 USSR, 1 Austral., 1 Canad., 4 Eng. and 1 USA (1945-1954). Tables; graphs.

Institution : Acad. of Sc., Ukr. SSR. Inst. of Phys. Chem. im. L. V. Pisarzhevskiy

Submitted : April 14, 1955

RUBANIK, M.Ya.; ~~KHOLYAVENKO, K.M.~~; GOROKHOVATSKIY, Ya.B.; BELAYA, A.A.;
POPOVA, Ye.M.; SHCHERBAKOVA, G.D.

Effect of macrofactors on the rate of catalytic oxidation of
ethylene. Ukr.khim.zhur. 22 no.2:190-196 '56. (MLRA 9:8)

1. Institut fizicheskoy khimii imeni L.V. Pisarzhevskogo AN USSR.
(Oxidation) (Ethylene)

KHOLYAVENKO, K.M.; RUBANIK, M.Ya.

Diagram method study of the effect of internal diffusion on
the oxidation rate of ethylene. Ukr. khim. zhur. 24 no.1:55-62
'58. (MIRA 11:4)

1. Institut fizicheskoy khimii im. L.V. Pisarzhevskogo
(Ethylene) (Oxidation) (Chemical reaction, Rate of)

5(4)

SOV/76-33-6-33/44

AUTHORS: Kholyavenko, K. M., Rubanik, M. Ya.

TITLE: Influence of the Porosity of a Silver Catalyst on the Accessibility of Its Internal Surfaces in the Process of Ethylene Oxidation (Vliyaniye poristosti serebryanogo katalizatora na dostupnost' vnutrenney poverkhnosti yego v protsesse okisleniya etilena)

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 6, pp 1381-1386 (USSR)

ABSTRACT: In the manufacture of tableted catalysts (C) from powders, it should be attempted to attain an optimum structure porosity. The tablets contain two types of pores - the micropores, i.e. the pores of the powder itself, the dimension of which depends on the production method of the powder, and the macropores, i.e. the pores between the powder particles, the dimensions of which depend on the dispersity of the powder and on the pressure in tableting. The industrial use demands maximum strength of the catalyst tablets. The high pressure applied for this reason can, however, bring about a reduction of the specific surface, and reduce its utility for the reaction.

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For this reason, the investigations mentioned in the title

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Influence of the Porosity of a Silver Catalyst on the Accessibility of Its Internal Surfaces in the Process of Ethylene Oxidation

were carried out. The tablets of the silver catalyst with different pore structures were obtained by pressing the silver powder at pressures of from 154-4350 atmospheres. The macro-structure of the (C) was determined by an approximation method from the gas permeability, the effective diffusion coefficient, and the porosity (Ref 4). The general internal surface was measured by the method of low-temperature adsorption of nitrogen. The measurement results obtained (Tables 1, 2) show that a reduction of porosity of the tablets from 52 to 18% by an increase in pressure in tableting leads to a reduction of the diameter of the macropores and to an increase in branching, that the catalyst surface does not change, and that the effective diffusion coefficient of the reacting substance (ethylene) decreases. The porous structure of the tableted silver catalysts has micropores with a mean diameter of 10^{-6} cm and macropores of 10^{-4} cm. The specific surface of the former is $1.06 \text{ m}^2/\text{g}$, and of the latter $0.14 \text{ m}^2/\text{g}$. The experiments on the influence on the oxidation rate of

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SOV/76-33-6-33/44

Influence of the Porosity of a Silver Catalyst on the Accessibility of Its Internal Surfaces in the Process of Ethylene Oxidation

ethylene by the internal porosity of the tableted silver catalyst (in a flow-circulation plant with a mixture of 3% ethylene in air) over a temperature interval of 180-300°C (Tables 3, 4) showed that at a reduction of porosity from 55 to 36% no influence can be observed; a further reduction leads to a retardation of the process which is the greater, the higher the temperature is. The present experiments confirm the connection between the utility of the internal surface of the porous catalyst structure and the oxidation rate of ethylene. There are 1 figure, 4 tables, and 8 references, 7 of which are Soviet.

ASSOCIATION: Akademiya nauk USSR, Institut fizicheskoy khimii im. L. V. Pisarzhevskogo, Kiyev (Academy of Sciences of the UkrSSR, Institute of Physical Chemistry imeni L. V. Pisarzhevskiy Kiyev)

SUBMITTED: December 9, 1957

Card 3/3

5(1,3)

AUTHORS: Gorokhovatskiy, Ya. B., Rubanik, M. Ya., SOV/20-125-1-21/67
Kholyavenko, K. M.

TITLE: On the Influence Exercised by Reaction Products on the Rate
of the Catalytic Oxidation of Ethylene (Vliyaniye produktov
reaktsii na skorost' kataliticheskogo okisleniya etilena)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 1, pp 83-86
(USSR)

ABSTRACT: The problem mentioned in the title was to be investigated in
detail in the present paper since it is still rather in-
sufficiently dealt with in publications (Ref 1). These reaction
products are ethylene oxide, CO_2 , and steam. The flow-
circulation method (Ref 2) was employed for these
investigations. The rate was measured with constant
concentrations in the cycle of the initial substances and with
different concentrations of the reaction products. For this
purpose the flow rate and the ethylene concentration of the
supply mixture were measured at a constant temperature. The
acceleration of the flow led to a decrease in the ethylene
oxidation. The reaction rate, however, increased (Table 1).

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on the Rate of the Catalytic Oxidation of Ethylene

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This effect may be explained only by the decrease of concentration of the inhibiting products (Ref 3). In order to find out which product mainly inhibits the reaction, traps (collecting vessels)(Fig 1) were introduced between the pump and the reactor. In these traps the individual reaction products were captured which formed during the passage through the catalyst. Since in this way the product concerned was eliminated (or its quantity at least strongly reduced) its influence could be estimated by a comparison of the reaction rate in its presence and absence. Table 2 shows the action of H_2O and CO_2 on the oxidation rate of C_2H_4 at 215° . The reaction rate increases by approximately 1.2 - 1.25 times due to dehydration without a variation in the selectivity. A simultaneous removal of H_2O and CO_2 increases the rate by about 1.6 - 1.7 times. The selectivity decreasing in the case of a removal of CO_2 shows that CO_2 inhibits the reaction of the complete ethylene oxidation more strongly than the reaction of C_2H_4O formation. Higher amounts of CO_2 have a weaker inhibiting effect than smaller ones (Fig 2).

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on the Rate of the Catalytic Oxidation of Ethylene

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Table 3 shows the action of C_2H_4O . Its removal accelerates the reaction more than mere dehydration. Acceleration was, however, not uniform in the various experiments. In this case probably the decrease of concentration of the remaining C_2H_4O has produced an effect. This was confirmed by experiments on another catalyst (Table 3). The reaction products form a series with respect to their inhibiting effect:
 $C_2H_4O > CO_2 > H_2O$. A. A. Belaya, Ye. N. Popova and G. D. Shcherbakova took part in the experimental work. V. A. Royter, Corresponding Member, AS UkrSSR gave advice. There are 2 figures, 3 tables, and 5 references, 4 of which are Soviet.

ASSOCIATION: Institut fizicheskoy khimii im. L. V. Pisarzhevskogo Akademii nauk USSR (Institute of Physical Chemistry imeni L. V. Pisarzhevskiy of the Academy of Sciences, UkrSSR)

PRESENTED: November 25, 1958, by B. A. Kazanskiy, Academician

SUBMITTED: December 9, 1957
Card 3/3

KHOLYAVENKO, K. M. Cand Chem Sci -- (diss) "Study of the effect of internal diffusion upon the ^{rate} of the reaction of oxidation of ethylene into ethylene oxide." Kiev, 1959. 13 pp (Acad Sci UkSSR. Inst of Phys Chemistry im L.V. Pisarshevskiy), 175 copies (KL, 52-59, 117)

-22-

ANDRIYEVSKIY, R.A.; KHOLYAVENKO, K.M., PILYANKEVICH, A.N.

Comparative investigation by various methods of the specific
surface of metal powders. Vop. por. met. i prochn. mat. no.8:3-7
'60. (MIRA 13:8)

(Metal powders) (Surface chemistry)

ANDRIEVSKI, R.A. [Andriyevskiy, R.A.]; HOLEAVENKO, K.H. [Kholyavenko, K.M.];
PILEANKEVICI, A.N. [Pilyankevich, A.N.]

Specific surfaces of metallic powders studies comparatively
and by various methods. Analele metalurgie 16 no.2:137-141
Ap-Je '62.

KHOLYAVENKO, K.M.; RUBANIK, M.Ya.; CHERNUKHINA, N.A.

Chemisorption method used for determining the surface area of silver deposited on a carrier. Kin. i kat. 5 no.3:505-512 My-Je '64. (MIRA 17:11)

1. Institut fizicheskoy khimii imeni Pissarzhevskogo AN UkrSSR.

GEREY, S.V.; KHOLYAVENKO, K.M.; RUBANIK, M.Ya.

Chemisorption of ethylene and oxygen on silver under conditions close to catalysis. Report No.2: Effect of the preceding adsorption of oxygen on the subsequent adsorption of ethylene. Ukr. khim. zhur. 31 no.3:263-270 '65. (MIRA 13:4)

1. Institut fizicheskoy khimii im. L.V.Pisarzhevskogo AN UkrSSR.

GEREY, S.V.; KHOLYAVENKO, K.M.; RUBANIK, M.Ya.

Chemisorption of oxygen and ethylene on silver under conditions close to catalysis. Report 1: Chemisorption of a mixture of oxygen and ethylene. Ukr.khim.zhur. 31 no.2:166-171 '65.
(MIRA 18:4)

1. Institut fizicheskoy khimii im. I.V.Pisarzhevskogo AN UkrSSR.

GEREY, S.V.; KHOLYAVENKO, K.M.; RUBANIK, M.Ya.

Chemisorption of ethylene and oxygen under conditions close to catalysis. Part 3: Infrared spectra of ethylene chemisorbed on silver. Ukr.khim.zhur. 31 no.5:449-457 '65.

(MIRA 18:12)

1. Institut fizicheskoy khimii imeni Pisarzhevskogo AN UkrSSR. Submitted July 22, 1964.

KHOLYAVIN, B.

Work of efficiency promoters of the meat combine. Mias.ind.
SSSR 30 no.1:19-20 '59. (MIRA 12:4)

1. Glavnyy inzhener Chelyabinskogo myasokombinata.
(Chelyabinsk--Meat industry--Equipment and supplies)

~~KHOLYAVKIN~~, I.F.

Large-panel housing construction. Transp.stroi. 9 no.6:18-19 Je '59.
(MIRA 12:11)

1. Glavnyy tekhnolog Upravleniya stroitel'stva Stalinsko-Magnitogorskoy magistrali.
(Akmolinsk--Apartment houses) (Concrete slabs)

L 37639-65 EPT(c)/EPR/EWP(j)/EWT(m)/T Pc-4/Pr-4/Ps-4 RPL RM/WM/JW/WE

ACCESSION NR: AP5007988

S/0318/65/000/002/0030/0033

AUTHOR: Lymar', P. S.; Besedin, D. F.; Kholyavko, G. D.; Khudyakov, V. I.

TITLE: Automation of a catalytic hydrocarbon gas converter for hydrogen production

SOURCE: Neftepererabotka i neftekhimiya, no. 2, 1965, 30-33

TOPIC TAGS: hydrogen production, hydrocarbon converter, catalytic hydrocarbon converter, automatic hydrocarbon converter, nickel catalyst, refinery gas conversion, natural gas conversion, automatic control system

ABSTRACT: The authors describe the layout, instrumentation and achieved efficiency of the closed-loop control system of a catalytic steam conversion unit for hydrogen production. The unit for converting refinery or natural gas over Ni-catalysts at 750-800C and 4 atm. pressure consists of an ethanolamine scrubber, horizontal preheater, primary and secondary Cu and Cu-Zn catalytic refining units, ZnO absorber for H₂S, tubular reactors for steam conversion on Ni-catalysts, steam-product gas heat exchanger and a vertical fuel gas-product gas heat exchanger (see Fig. 1 of the Enclosure). The original control system, based on old-

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type instruments and manual temperature controls, was improved by centralizing the process control of all reactors and by employing closed-loop cascade controls for: 1) the temperature in the heating and reaction zones in steam converters; 2) the steam input based on the humidity of the product gas; and 3) the fuel gas-air ratio, based on the oxygen content of flue gases. Electronic and pneumatic analytic, control and alarm instruments were used, and feed, steam, fuel gas and air streams were regulated. Savings achieved comprised an 8.8% decrease in steam consumption, a decrease in feed consumption and a decrease in the labor force by 20 men, estimated as a total of 150,000 rubles/yr. The capacity of the plant is not specified. Orig. art. has: 4 figures.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 01

SUB CODE: OC, IE

NO REF SOV: 000

OTHER: 000

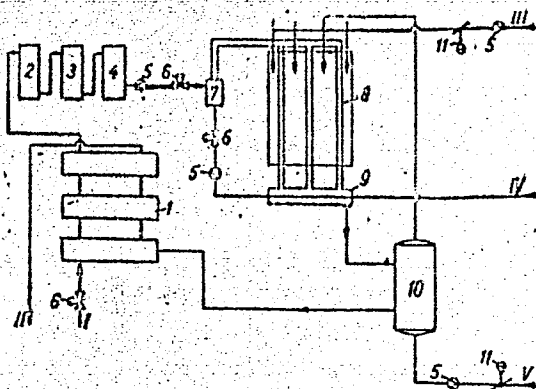
Card 2/4

L 37639-65

ACCESSION NR: AP5007988

ENCLOSURE: 01

0



Card 3/4

L 37639-65

ACCESSION NR: AP5007988

ENCLOSURE: QX

0

Figure 1. Flow diagram of the process for conversion of hydrocarbon gases:

1 - horizontal heat exchangers; 2 - converter; 3 - absorber; 4 - secondary re-finer; 5 - diaphragm of flow meter; 6 - control valve; 7 - injector-mixer; 8 - conversion furnace; 9 - collector -heat exchanger; 10 - vertical heat exchanger; 11 - valve.

Process streams: I - feed - hydrocarbon gas; II - product gas; III - compressed air; IV - steam; V - fuel gas.

Card 4/4 *mb*

L 6944-65 EWT(1)/EPA(b)/EWG(v)/FCS(k) Pd-4/Pe-5 AFETR/ASD(f)/AFWL/
ASD(p)-3/AFTC(a)/AEDC(a)/BSD/SSD WW 8/-179/64/000/002/0019/0023 60
ACCESSION NR: AP4035058 59

AUTHOR: Kholyavko, V. I. (Kha'kov)

TITLE: Hypersonic gas flow around a flat, blunted plate at a small angle of attack

SOURCE: Izvestiya. Mekhanika i mashinostroyeniye, no. 2, 1964, 19-23

TOPIC TAGS: flat plate, blunted plate, hypersonic gas flow, shock wave, plate aerodynamic property, blunted plate aerodynamic property, angle of attack, aerodynamics

ABSTRACT: The author considers the characteristics of flow around a blunted flat plate, placed at a small angle of attack to a hypersonic stream of non-viscous ideal gas. The principle of plane cross sections is employed and solution of the problem is reduced to integrating one non-linear differential equation to determine the position of the shock wave. Equations are derived for the pressure on the surface of an arbitrary body with a blunted leading edge and for the motion of the shock wave. These are then narrowed to the case of a flat blunted plate and an approximate solution is derived for small values of the angle of attack and

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L 6944-65

ACCESSION NR: AP4035058

high Mach numbers of the crushing flow. Dynamic characteristics (lift coefficient, pressure center location) are determined for a flow around the flat, blunt-ed plate at a small angle of attack and for finite values of Mach number. "The author expresses gratitude to N. A. Paliya for her major contribution in completing the calculations." Orig. art. has: 2 graphs, 12 formulas.

ASSOCIATION: none

SUBMITTED: 15Jul63

DATE ACQ: 20Apr64

ENCL: 00

SUB CODE: 123

NO REF SOV: 002

OTHER: 001

Card 2/2

L 16164-66 EWT(d)/EWT(1)/EWP(m)/EWT(m)/EWP(w)/EWA(d)/EWP(v)/EWP(k)/F.(k)/EWA(h)/
 ACC NR: AT6004117 ETC(m)-6/EWA(1) SOURCE CODE: UR/O42Q/65/000/001/0010/0016
 AUTHOR: Kholyavko, V. I. IJP(c) WW/EM

ORG: none

TITLE: Hypersonic flow past a slender, blunt cone at a small angle of attack

SOURCE: 1155 Samoletostroyeniye i tekhnika vozdukh-
 nogo flota, no. 1, 1965, 10-16

TOPIC TAGS: reentry aerodynamics, blunt body reentry, atmospheric reentry, hyper-
 sonic aerodynamics, hypersonic flow

ABSTRACT: The lifting force and the location of the center of pressure of a
 slender, blunt cone in a hypersonic stream at a small angle of attack (less than
 half of the vertex angle) were determined. The concept of an equivalent cone was
 introduced. The latter has the same resistance of the blunted front part as the
 analyzed cone and a vertex angle which equals twice the local inclination angle
 between the generatrix of the analyzed cone and the approaching flow. It was
 further assumed that the pressure distribution along the generatrix coincides with
 that on the surface of the equivalent cone at zero angle of attack. The problem

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L 16164-66

ACC NR: AT6004117

of flow past a blunt body at a small angle of attack was thus reduced to the solution of a symmetric flow past the equivalent cones, which was carried out by using an analogy with non-steady state flow processes. The calculated aerodynamic characteristics of the cone showed that the transverse force acting in the front part of the cone is close to zero and the center of pressure is shifted toward the rear of the cone. Orig. art. has: 3 figures and 3 formulas. [KT]

SUB CODE: 01, 20/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 001/ ATD PRESS:

4204

Card

2/2

L 17875-66 EWT(1)/EWP(m)/EWA(d)/EWA(1)

ACC NR: AP6007886

SOURCE CODE: UR/0420/65/000/002/0003/0008

AUTHOR: Kholyavko, V. I.

ORG: none

TITLE: ^{1.55} Aerodynamic properties of slender bodies of revolution in hypersonic gas flow at angle of attack

^{1.55} SOURCE: Samoletostroyeniye i tekhnika vozdushnogo flota, no. 2, 1965, 3-8

TOPIC TAGS: hypersonic aerodynamics, hypersonic flow, shock wave, aerodynamic drag, aerodynamic drag moment, drag coefficient, angle of attack, aerodynamic center

ABSTRACT: An approximate method for calculating hypersonic flows past slender bodies of revolution at an angle of attack is outlined. It is intended for rapid evaluation of aerodynamic properties of a wide category of bodies. The concept of an equivalent body of revolution is introduced whose generatrix equation coincides with the local shape of the body surface. This local configuration is formed by the line of intersection of the surface of a given body with a plane containing the axis drawn from the tip of the body in the direction of free flow

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L 17875-66

ACC NR: AP6007886

(see Fig. 1). It is assumed that the pressure distribution along this local configuration of the body surface will be the same as on the

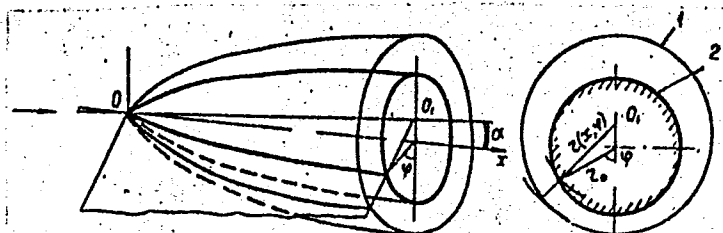


Fig. 1. Geometry of body

equivalent body of revolution at zero angle of attack. In this formulation, the problem of hypersonic flows past slender bodies at an angle of attack is reduced to considering axisymmetrical flows past an equivalent body of revolution which, in turn, may be determined by using the similarity with unsteady flow. Expressions are derived for determining the shape of the shock wave, pressure distribution, and coefficients of drag, normal force, and the moment. It is shown that the correctness of the computation scheme is substantiated by the fact that this method does not contradict the basic assumptions of hypersonic similarity. Flows over power-law bodies whose generatrices are expressed by the relation $r/L = 0.5\lambda^{-1}(x/L)^n$ are considered as an

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L 17875-66

ACC NR: AP6007886

example. The results show that at a given aspect ratio, the drag is minimum at a certain value of the exponent n , which depends upon γ , and is equal to $1/3 \lambda^{-2}$ and $0.38 \lambda^{-2}$ at $\gamma = 1$ and $1, 4$ respectively, thus presenting a gain with respect to the cone ($n = 1$) of 33% and 24% respectively. They also show that the drag depends weakly upon variation of γ at least for n values distant from the critical value $n = 1/2$. The location of the center of pressure is determined and its dependence on n and γ is given in a graph, which shows that the center moves forward with decreasing n . Orig. art. has: 4 figures and 10 formulas.

[AB]

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 002/ ATD PRESS: 4208

Card 3/3 TS

h2100

10.1220

S/179/62/000/005/001/012
EO31/E135

AUTHOR: Kholyavko, V.I. (Khar'kov)

TITLE: The flow round a flat plate at large supersonic velocities

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Mekhanika i mashinostroyeniye, no.5, 1962, 26-31

TEXT: The approximate solution of a similar problem of flow round a blunt wedge was obtained by L.I. Cherniy by expanding the parameters of the flow in series in powers of $(\gamma - 1)/(\gamma + 1)$. The problem of the flow round a blunt plate at incidence was solved by A.F. Burke by the method of small disturbances. The integral relations for conservation of energy, impulse and mass applied to the volume of gas between the surface of the body and the shock wave are used to determine the position of the shock wave. It is shown that the density can be considered constant across the layer between the surface and the shock wave and the variation in pressure in this layer is neglected. An approximate expression is

Card 1/3

The flow round a flat plate at large... S/179/62/000/005/001/012
E031/E135

given for the pressure at the surface, and expressions are given for the position of the shock wave in general and in the particular case of incidence α . In the case $\alpha = 0$, the solution corresponding to the case of symmetrical flow round a blunt plate and agreeing with the results of L.I. Cherniy, is obtained. The limiting cases of t tending to zero and infinity are considered. It is shown that if near the leading edge of a blunt plate (t tends to zero) the flow is determined by the bluntness, then far downstream (t tends to infinity) the influence of the bluntness diminishes and the pressure tends to the value on a sharp-nosed plate. The solution of the equation for the position of the shock wave is derived for small values of t and it is clear that the solution is valid not only for a blunt plate at incidence but also for a blunt wedge. Finally the aerodynamic characteristics of a blunt plate at incidence in a highly supersonic stream are considered. Expressions are given for the pressure distribution on the upper and lower surfaces, the total lift coefficient and the coordinate of the centre of pressure.

Card 2/3

The flow round a flat plate at large... S/179/62/000/005/001/012
E031/E135

At large incidence the effect of the bluntness diminishes and the lift coefficient approximates to that for a sharp-nosed plate. The bluntness causes the centre of pressure to move forward and, as the incidence increases, the centre of pressure moves to the position corresponding to that pertaining to a sharp-nosed plate. There are 4 figures. f

SUBMITTED: February 8, 1962

Card 3/3

KHOLYAVKO, V.I. (Khar'kov)

Hypersonic gas flow about a plain obtused plate at a low
angle of attack. Izv.An SSSR. Mekh. i mashinostr. no. 2:
19-23 Mr-Ap '64. (MIRA 17:5)

L 15504-63

ACCESSION NR:

EPA(b)/EWT(1)/BDS
AP3007040

AEDG/AFFTC/ASD/AFMDC/APGC Pd-1
S/0147/63/000/003/0043/0050

AUTHOR: Kholyavko, V. I.

TITLE: Aerodynamic characteristics of airfoils and wings with blunt-nosed leading edges at high supersonic speeds

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 3, 1963, 43-50

TOPIC TAGS: airfoil, blunt-nosed airfoil, wing, delta wing, supersonic flow, inviscid gas, equivalence principle, shock wave, shock wave propagation, angle of attack, lift drag coefficient, lift coefficient, sweep angle, lift-drag ratio, power law airfoil

ABSTRACT: The problem of supersonic flow of an inviscid perfect gas over blunt-nosed plane bodies is examined, and a solution is sought through the use of the equivalence principle for supersonic flows. The solution is reduced to the integration of a linear equation for the determination of the shock-wave propagation, which is established by the application to the gas volume between the

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L 15504-63

ACCESSION NR: AP3007040

body surface and the shock wave of the integral correlations of the laws of the conservation of energy, mass, and momentum. Several particular cases of flow are considered, i.e., over 1) a blunt-nosed, 1° flat plate, 2) a 2° slender airfoil, 3) a power-law airfoil, and 4) a 4° flat plate at angle of attack. The influence of bluntness on the lift coefficient and of sweep on pressure distribution on the surface of a blunt-nosed plate are determined. Calculations of the lift-drag ratio k of delta wings with blunt-nosed leading edges are made for the simultaneous evaluation of the influence of sweep and of edge bluntness. The results (see Figs. 1 and 2 of Enclosure) show that the maximum k of such a wing is rather small, even with a large sweep angle. Orig. art. has: 5 figures and 23 formulas.

ASSOCIATION: none

SUBMITTED: 13Oct62

DATE ACQ: 07Oct63

ENCL: 02

SUB CODE: AI

NO REF SOV: 003

OTHER: 001

Card 2/4

ACCESSION NR: AP4043413

S/0147/64/000/003/0003/0010

AUTHOR: Kholyavko, V. I.

TITLE: Hypersonic flow past power law bodies at small angle of attack

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 3, 1964, 3-10

TOPIC TAGS: hypersonic flow, inviscid flow, shock wave, integral relation method, flow past thin body

ABSTRACT: Hypersonic flow of an inviscid, perfect gas past plane bodies defined by a power law of the form $y = ax^n$ at a small angle of attack is investigated. The motion of the gas is calculated by the method of integral relations, making use of the unsteady flow analogy. The problem is then reduced to integrating an ordinary differential equation for determining the position of the shock wave. An approximate solution of this equation is presented in the form of a series in powers of the angle of attack α , whereby the form of the shock wave and the aerodynamic properties of pointed and slightly blunted bodies are determined. The effect of the shape and bluntness

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ACCESSION NR: AP4043413

of the leading edge on the flow pattern is analyzed by using the approximate solution of the shock wave equation. It was found that variations in profile shape (different values of $n = 0.8$ to 1.0) have little effect on the lift coefficient, and at the same time, a decrease in the exponent n leads to forward displacement of the center of pressure of the profile. It is stated, however, that the lack of experimental data and theoretical calculations by accurate methods precludes an evaluation of the applicability of the approximate solution. Orig. art. has: 4 figures and 10 formulas.

ASSOCIATION: none

SUBMITTED: 13Jan64

SUB CODE: ME

ATD PRESS: 3087

NO REF SOV: 003

ENCL: 00

OTHER: 000

Card 2/2

KHOLYAVKO, V.I.

Hypersonic gas flow about bodies of exponential shape under
low angle of attack. Izv. vys. ucheb. zav.; av. tekhn. 7
no.3:3-10 '64. (MIRA 17:9)

KHOLYAVKO, V.S.

✓
Fuel
867. Grease consumption standards for new car models are set too high. V. B. Kholyavko and P. D. Atamanenko. *Neft. Khos.*, 1986, (1), 61-3. Standard set for grease consumption, i.e. 1% by wt of fuel consumption, dates from pre-war days and is shown to be too high for contemporary U.S.S.R. vehicles. Tests made indicate that 0.3-0.4% is a more realistic value, with 0.5% for certain makes of car. V. B.

2

KONOVALOV, V.S.; LAPITSKIY, V.I.; LEGKOSTUP, O.I.; LYSENKO, I.V.;
OKHOTSKIY, V.B.; KHOLYAVKO, Z.I.

The role of nonmetallic inclusions on the formation of internal
laps in pipe. Izv. vys. ucheb. zav.; chern. met. 6 no.10:37-42
'63. (MIRA 16:12)

1. Dnepropetrovskiy metallurgicheskiy institut.

KHOLYAVO, Ch.A.; BULOYCHIK, N.P.

Plows for stony soils. Biul. tekhn.-ekon. inform. no. 4:59-61
'61. (MIRA 14:5)
(Plows)

KHO LYAUSKIY *B-64*

5A *B-64*

621.315.056
 4844. Graphical method for determining electro-
 dynamic stresses in high voltage apparatus. B. G.
 KIRILYAN. *Elektrichestvo* (No. 6) 58-62 (June,
 1957) in Russian.
 For determination of mechanical forces on com-
 ponents of h.v. distribution equipment it is necessary
 to determine the non-dimensional coefficients of the
 circuits which depend solely upon the relative position
 of their parts. Graphical integration is used to
 simplify such determination for more important
 practical cases of relative positions of conductors.
 J. LUKASZEWICZ

AS 58-56.6 METALLURGICAL LITERATURE CLASSIFICATION

KHOLYAVSKIY, G.B., inzhener.

"Omission" of Dean Harrington. Elektrichestvo no.4:82-83 Ap '54,
(MLRA 7:5)

1. Zavod "Elektroapparat". (Harrington, Dean) (Electric circuits)

Kholyavskiy, G. B.

AID P - 3043

Subject : USSR/Electricity

Card 1/2 Pub. 27 - 30/33

Author : Dean Harrington, G. El. Co., Schenectady, N. Y.

Title : Explanation by Harrington in Electrical Engineering
(Letters to the editor)

Periodical : Elektrichestvo, 7, 149, J1 1955

Abstract : A letter entitled "Dean Harrington's Omission" by G. B. Kholyavskiy appeared in Elektrichestvo, April, 1954 pp 62-63. The letter referred to Harrington's paper "Forces in Machine End Windings", AIEE Transactions, October 1952, pp. 849-848. Harrington claims that he was unaware of G. B. Kholyavskiy's earlier paper "Grapho-Analytical Method of Determining Electrodynamic Forces in High-Voltage Apparatus", which appeared in Elektrichestvo, No. 6, pp. 58-62. These were two independent articles. This journal gives a translation of Dean Harrington's letter with a comment, that the letter proves a positive tendency toward the normalization and strengthening of

Elektrichestvo, 7, 149, J1 1955

AID P - 3043

Card 2/2 Pub. 27 - 30/33

international scientific contacts.

Institution : None

Submitted : No date

KRATIROV, A.D.; GOL'DIN, O.Ye.; SAVENKO, V.G.; PINES, G.Ya.; KOCHENOVA,
A.I.; GREYMER, L.K.; ARONOVICH, I.S.; KHOLYAVSKIY, G.B.

Professor V.B. Romanovskii. Elektrichestvo no.2:92 # '56.

(MLRA 9:5)

(Romanovskii, Vladimir Borisovich, 1896-)

ALEKSANDROV, A.G., dots; ARONOVICH, I.S., inzh.; BABIKOV, M.A., doktor tekhn.nauk; BATUSOV, S.V., kand.tekhn.nauk; BEL'KIND, L.D., doktor tekhn.nauk; VENIKOV, V.A., doktor tekhn.nauk; VESELOVSKIY, O.H., kand.tekhn.nauk; GOLOVAN, A.T., doktor tekhn.nauk; GOLUBTSOVA, V.A., doktor tekhn.nauk; GRAYNER, L.K., inzh.; GRUDINSKIY, P.G., prof.; GUSEV, S.A., inzh.; DMOKHOVSKAYA, L.F., kand.tekhn.nauk; DROZDOV, N.G., doktor tekhn.nauk; IVANOV, A.P., doktor tekhn.nauk [deceased]; KAGANOV, I.L., doktor tekhn.nauk; KERBER, L.L., inzh.; KOCHENOVA, A.I., kand.tekhn.nauk.; IARIONOV, A.N.; MINOV, D.K., doktor tekhn.nauk; MNTUSHIL, A.V., doktor tekhn.nauk; NIKULIN, N.V., kand.tekhn.nauk; NIIMMER, R.A., prof.; PANTYUSHIN, V.S., prof.; PASYNKOV, V.V., doktor tekhn.nauk; PETROV, G.N., doktor tekhn.nauk; POLIVANOV, K.M., doktor tekhn.nauk; PRIVEZMENTSEV, V.A., doktor tekhn.nauk; RADUNSKIY, L.D., inzh.; RENNE, V.T., doktor tekhn.nauk; SVENCHANSKIY, A.D., doktor tekhn.nauk; SOLOV'YEV, I.I., doktor tekhn.nauk; STUPEL' F.A., kand.tekhn.nauk; TALITSKIY, A.V., prof.; TEMNIKOV, F.Ye., kand.tekhn.nauk; FEDOROV, L.I., inzh.; FEDOSEYEV, A.M., doktor tekhn.nauk; KHOLYAVSKIY, G.B., inzh.; CHECHET, Yu.S., doktor tekhn.nauk; SHNEY-BERG, Ya.A., kand.tekhn.nauk; SHUMILOVSKIY, N.N., doktor tekhn.nauk; AMTIK, I.B., red.; MEDVEDEV, L.Ya., tekhn.red.

[The history of power engineering in the U.S.S.R. in three volumes]
Istoriia energeticheskoi tekhniki SSSR v trekh tomakh. Moskva, Gos. energ. izd-vo.

(Continued on next card)

ALEKSANDROV, A.G.--(continued) Card 2.

Vol.2. [Electric engineering] ~~Elektrotehnika~~. Avtorskii kollektiv
toma: Aleksandrov i dr. 1957. 727 p. (MIRA 11:2)

1. Moscow. Moskovskiy energeticheskiy institut. 2. Chlen-korrespon-
dent AN SSSR (for Larionov)
(~~Electric engineering~~)

KHOLYAVSKIY, G.B., inzh.

Review of State Standard 687-41 for high-voltage cutouts. Vest.
electroprom. 31 no.3:65-67 Mr '60. (MIRA 13:6)
(Electric cutouts--Standards)

ZALESSKIY, Aleksandr Mikhaylovich, doktor tekhn. nauk, prof.; BACHURIN, Nikolay Ivanovich; ARONOVICH, I.S., inzh., ~~retsenzent~~; GREYNER, L.K., inzh., ~~retsenzent~~; GREYSUKH, M.A., inzh., ~~retsenzent~~; KOCHENOVA, A.I., inzh., ~~retsenzent~~; MESSERMAN, G.T., inzh., ~~retsenzent~~; KHOLYAVSKIY, G.B., inzh., ~~retsenzent~~; SHKLYAR, B.N., inzh., ~~retsenzent~~; ~~AFANAS'YEV, V.V., red.~~; SOBOLEVA, Ye.M., tekhn. red.

[Insulation of high-voltage apparatus] Izoliatsiia apparatov vysokogo napriazheniia. Moskva, Gos energ. izd-vo, 1961. 258 p. (MIRA 14:9)

1. Zavod "Elektroapparat" (for Aronovich, Greyner, Greysukh, Kochenova, Messerman, Kholyavskiy, Shklyar).
(Electric insulators and insulation)

KHOLYAVSKIY, Grigoriy Borisovich; KRASNOGORODTSEV, S.A., red.;
ZHITNIKOVA, O.S., tekhn. red.

[Calculating electrodynamic forces in electric devices] Ras-
chet elektrodinamicheskikh usilii v elektricheskikh apparatakh.
Moskva, Gosenergoizdat, 1962. 183 p. (MIRA 15:7)
(Electrodynamics)
(Electric apparatus and appliances)

KHOLYAVSKIY, G.B.; KRASNOGORODTSEV, S.A.

Clarification of formulas. Vest. elektroprom. 34 no.5:80 My
'63. (MIRA 16:5)
(Electric conductors)

MAZO, Rakhil' Efraimovna; FOGEL'SON, L.I., prof., red.; KHOLYAVSKIY, S.,
red.; SIDERKO, N., tekhn. red.

[Electrocardiograms of healthy children] Elektrokardiogrammy
zdorovykh detei. Minsk, Izd-vo Akad.nauk BSSR, 1961. 197 p.
(MIRA 15:1)
(Electrocardiography)

SIROTA, N.N., akademik, otv. red.; SOTSKOV, B.S., red.;
ROZENBLAT, M.A., prof., red.; BASHKIROV, L.A., kand.
khim. nauk, red.; KHOLYAVSKIY, S., red. izd-va;
VOLOKHANOVICH, I., tekhn. red.

[Ferrites and contactless elements] Ferrity i beskon-
taktnye elementy; doklady. Minsk, Izd-vo AN BSSR, 1963.
418 p. (MIRA 17:3)

1. Vsesoyuznoye soveshchaniye po ferritam i po beskontakt-
nym magnitnym elementam avtomatiki. 3d, Minsk. 2. Akade-
miya nauk Bel.SSR (for Sirota). 3. Chlen-korrespondent AN
SSSR (for Sotskov).

KHOLZAKOV, V.I., Cand Tech Sci -- (diss) "Effect of zinc ^{walls} on the
wear of the fire-resistant ~~masonry~~ of ~~the~~ blast furnace."
Mos, 1958, 11 pp (Acad Sci USSR. Inst of Metallurgy im
A.A. Baykov) 120 copies (KL, 23-58, 108)

- 89 -

Kholzakov, V.I.

24-58-3-10/38

AUTHORS: Kholzakov, V.I. and Tsylev, L.M. (Moscow)

TITLE: ~~Influence of the~~ Action of Zinc on the Refractory Lining of Blast Furnaces (Vliyanie vozdeystviya tsinka na ognepornuyu kladku domennykh pechey)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 3, pp 89-95 (USSR)

ABSTRACT: A number of hypotheses exist on the causes of disruption and growth of refractory linings of blast furnaces in the case of presence of zinc and these are based on the following phenomena: (1) the difference between the coefficients of expansion of the zinc and the fireclay is very large, the ratio being 6:1; (2) crystallization of zinc oxide in the top part of the shaft lining; (3) separation of carbon black and of zinc oxide in the lining due to the simultaneous effect of the reactions of oxidation of the zinc and of decomposition of the carbon monoxide; (4) oxidation of the zinc earlier deposited in the lining. Views based on the first and the second of the enumerated phenomena have not been confirmed by the investigations at all. As regards the third-mentioned phenomenon, experimental results obtained by Strashnikov and his team (Refs. 1, 2) are available. On the basis of laboratory investigations he arrived at the conclusion that neither

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24-58-3-10/38

Influence of the Action of Zinc on the Refractory Lining of Blast Furnaces.

zinc nor zinc oxide do by themselves bring about failure of the refractory lining and that the failure takes place as a result of separation in the lining of carbon black and of zinc oxide causing the formation of cracks which are filled up by zinc oxide and bringing about increase in the volume of the lining. Hartmann (Ref.3), Feldmann (Ref.4) and Zagzyanskiy (Ref.5) attribute the failure to the oxidation of zinc which became deposited earlier in the lining. In practice this assumption was proved only by Hartmann. However, he did not reproduce conditions existing inside the blast furnace and therefore his results cannot be considered as a proof that this process of disruption of the lining does really take place inside the blast furnace. The disruption and growth of the lining of blast furnaces of the Kuznetskiy and Novo-Tagil'skiy Works between 1939 and 1945 is briefly described. On the suggestion of Academician I. P. Bardin, carbon blocks were placed into the lining at three horizons during a capital overhaul in April, 1953 and from these

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Influence of the Action of Zinc on the Refractory Lining of Blast Furnaces.

specimens were taken at various locations of the same horizon. Analysis of the specimens showed a high zinc content in the carbon blocks which is attributed to the high degree of porosity of these blocks. In 1956, the bottom part of the shaft of a blast furnace in the Novo-Tagil'skiy Works was made of carbon blocks. According to the observations of A. A. Voznesenskiy and V. M. Minkin, the deformations and the fractures of blast furnace jackets in the blast furnaces of the Kuznetskiy Works are due, to a certain extent, to the formation in the shaft and the body of ferrous incrustations, which occurs particularly frequently during changing over of blast furnaces from open-hearth pig to foundry pig and vice versa. The influence of this factor manifested itself particularly clearly in one blast furnace, where it was established that the sections suffering intensive disruption of the jacket are not those where there is a maximum accumulation of zinc in the lining but where the incrustation is most intensive. To elucidate the mechanism of the influence of zinc on the failure of the lining, the authors of this paper carried out investigations under laboratory conditions. These showed that one of the main causes of disruption and

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24-58-3-10/38

Influence of the Action of Zinc on the Refractory Lining of Blast Furnaces.

growth of linings of blast furnaces operating with zinc-containing ores is the formation of an iron-zinc alloy with an iron content of 4 to 20%. An alloy containing 4 to 20% Fe can form, under conditions of contact of metallic zinc with the iron, incrustations at temperatures between 650 and 800°C. Such an alloy acts as a catalyst of the reaction involving decomposition of the carbon monoxide and the separated out carbon black brings about disruption of the lining. There are 5 figures and 10 references, 5 of which are Soviet, 4 German and 1 English.

SUBMITTED: May 28, 1957.

1. Refractory materials 2. Zinc--Effects 3. Blast--Furnaces

Card 4/4

OSTROUKHOV, M.Ya.; KHOLZAKOV, V.I.; POPOV, Yu.A.

Large capacity blast furnace operations. Metallurg 5 no. 12:4-9
D '60. (MIRA 13:11)

1. Chelyabinskiy metallurgicheskiy zavod i Nauchno-issledovatel'skiy
institut matematiki.
(Blast furnaces)

S/137/62/000/003/053/191
A006/A101

AUTHORS: Kholzakov, V. I., Ostroukhov, M. Ya., Kopyrin, I. A., Vyatkin, G. P.,
Tarashchuk, N. T., Filipov, Yu. P., Nikol'skiy, M. A., Lapotyshkin,
V. P., Chistyakov, A. Ye., Pimenov, L. I.

TITLE: Experimental blast-furnace melting of oxidized nickel ores on matte

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 28, abstract 30189
("Sb. nauchno-tekhn. tr. N.-1. in-t metallurgii Chelyab. sovnarkhoza",
1961, no. 3, 164 - 170)

TEXT: During 5 months experimental melting of Ni-ore sinter and lumps
(coarse fraction) on matte was carried out in a 6.4-m² blast furnace. The follow-
ing statements were made: coke consumption is by about 20 - 25% less than in
melting in a shaft furnace operating on compressed air on account of preheated
blast and fuller utilization of the heat in the furnace; the SiO₂ content can be
raised up to 49%. The temperature of exhaust gases is 40 - 60°C. The deficiencies
of a blast furnace are: the necessity of using only well lumped charges; 0 - 55
fraction must be screened off before charging into the furnace; the hearth and

Card 1/2

Experimental blast-furnace melting...

S/137/62/000/003/053/191
A006/A101

the bosh of the furnace should be operated on compressed air. See also RZhMet,
1961, 10203, 30193.

A. Tseydler

[Abstracter's note: Complete translation]

Card 2/2

OSTROUKHOV, M.Ya.; TARASHCHUK, N.T.; FILIPPOV, Yu.P.; Kholzakov, V.I.

Blast furnace smelting of oxidized nickel ores for the production
of matte. TSvet.met. 34 no.9:82-83 S '61. (MIRA 14:10)
(Nickel--Metallurgy)

VYATKIN, G.P.; OSTROUKHOV, M.Ya.; Primali uchastiye: Kholzakov, V.I.;
Kopyrin, I.A.; Tarashchuk, N.T.; Filippov, Yu.P.; Nikol'skiy, M.A.;
Chistyakov, A.Ye.; Pimenov, L.I.

Investigating the process of blast furnace smelting for
the production of nickel matte. [Sbor. trud.] Nauch.-issl.inst.met.
no.4:71-81 '61. (MIRA 15:11)

(Nickel—Metallurgy)
(Blast furnaces)

KHOLZAKOV, V.I.; BRATCHENKO, V.P.; OSTROUKHOV, M.Ya.; LUKIN, P.G.; NEKIPELOV, S.P.;
POPOV, Yu.A.; GAVRILYUK, L.Ya.

Investigating the processes in the stack and hearth of a blast furnace
during smelting with sinter of Bakal and Sokolovka-Sarbay ores. Stal'
23 no.4:297-300 Ap '63. (MIRA 16:4)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii i
Chelyabinskiy metallurgicheskiy zavod.
(Blast furnaces)

KHOLZAKOV, V.I.; BRATCHENKO, V.P.; OSTROUKHOV, M.Ya.; LUKIN, P.G.;
GAVRILYUK, L.Ya.

Effect of the shape of a blast furnace working area on the distribution
of the gas flow. Metallurg 8 no.8:6-9 Ag '63. (MIRA 16:10)

BRATCHENKO, V.P.; KHOLZAKOV, V.I.; OSTROUKHOV, M.Ya.

Reduction and slag formation processes in blast furnaces
during the smelting of Bakal and Sokolovka Sarbay ores.

Izv. vys. ucheb. zav.; chern. met. 7 no.2:34-41 '64.

(MIRA 17:3)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.

VOL'F, M.Sh.; KHOLZAKOVA, N.G.

"Impairment of thinking in the mentally ill" by B.V. Zeigarnik. Reviewed by M.Sh. Vol'f, N.G. Kholzakova. Zhur.nerv.i psikh. 59 no.9: 1136-1137 '59. (MIRA 12:11)
(THOUGHT AND THINKING) (MENTAL ILLNESS) (ZEIGARNIK, B.V.)

KHOLZUNOV, A.G.; LERINMAN, S.M., inzh., retsenzent

[Fundamentals of the design of pneumatic drives] Osnovy
rascheta pnevmaticheskikh privodov. Izd.2., ispr. 1 dop.
Moskva, Mashinostroenie, 1964. 264 p. (MIRA 17:12)

25(2)

PHASE I BOOK EXPLOITATION

SOV/1856

Kholzunov, Aleksandr Grigor'yevich

Osnovy rascheta pnevmaticheskikh privodov (Fundamentals of the Design of Pneumatic Drives) Moscow, Mashgiz, 1959. 161 p. Errata slip inserted. 8,000 copies printed.

Reviewer: D.B. Vakser, Docent; Ed.: M.S. Mirkin, Engineer; Ed. of Publishing House: T.L. Leykina; Tech. Ed.: O.V. Speranskaya; Managing Ed. for Literature on Machine-building Technology (Leningrad Division, Mashgiz): Ye.P. Naumov, Engineer.

PURPOSE: This book is intended for engineering and technical workers and designers. It may also be used by students at vuzes.

COVERAGE: The book examines unsteady transitory processes of pneumatic drives. Practical methods are given for calculation of pressure in working compartments, velocity, and time of motion of performing links in relation to their travel distance. Particular

Card 1/3

APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000722220002-4

Fundamentals of the Design of Pneumatic Drives

cases of the work of pneumatic drives are discussed, the consumption of compressed air is determined, and numerical examples are given. The book describes basic systems of pneumatic drives, intensifiers, control and regulating apparatus, and stopping devices. Principles of action and some problems of strength calculation are given. In addition, the book discusses aerodynamic characteristics of pneumatic drives and gives basic aspects of flow analysis of a changing mass of gas at changing pressures. This analysis is also valid for other types of gas or steam machines. A dynamic analysis of pneumatic drives is also given. No personalities are mentioned. There are 7 Soviet references.

TABLE OF CONTENTS:

Preface	3
Ch. I. Brief Survey of Basic Systems of Pneumatic Drives	5
1. Piston pneumatic drives	5
2. Diaphragm drives	12
3. Auxilliary mechanisms and control apparatus	14
4. Intensifiers	22

Card 2/3

KHOMA, A.M.

Characteristics of the course of intrathoracic tuberculosis in children discharging pigmented strains of Mycobacterium. Probl. tub. 41 no.10:42-49 '63. (MIRA 17:9)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. - kand.med. nauk G.I.Chemeris, nauchnyy rukovoditel' - prof. I.T.Stukalo).

KHOMA, I.Yu. (Kiyev)

- Plastic zones around a circular hole in a plane nonhomogeneously stressed field taking into consideration normal and tangential forces. *Prykl.mekh.* 9 no.2:167-173 '63. (MIRA 16:3)

Institut mekhaniki AN UkrSSR.

(Strains and stresses)

KHOMA, A.M.

Sensitivity of the skin to various tuberculins in children with tuberculosis. Probl. tub. no.7:63-66 '63.

(MIRA\18:1)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta tuberkuleza (direktor - kand. med. nauk G.I. Chemeris, zamestitel' direktora po nauchnoy chasti - prof. I.T. Stukalo).

EVANOV, V.G.; KHOMA, B.V.

Determining the intake capacity of injection wells in the Dolina
field. Neft. i gaz.prom. no.1:49-51 Ja-Mr '65.

(MIRA 18:8)

ACCESSION NR: AP4010373

S/0198/64/010/001/0040/0045

AUTHOR: Khoma, I. Yu. (Kiev)

TITLE: Equations of sloping elastic-plastic shells

SOURCE: Prykladna mekhanika, v. 10, no. 1, 1964, 40-45

TOPIC TAGS: elasticity, plasticity, elastic-plastic, thin shell, deformation, plastic deformation, elastic deformation, critical load, sloping shell, Hooke law, Gauss-Codazzi equation, Hencky correlation, Poisson coefficient

ABSTRACT: Investigations of elastic-plastic problems with ideal plasticity are relatively few. The present work describes the derivation of a system of equations for sloping shells with elastic-plastic deformations, in particular for materials with ideal plasticity, on the basis of the theory of elastic sloping shells. The theory of small elastic-plastic deformations is assumed and Hencky correlations are used instead of the Hooke law. At $\phi = 1 : 20$ the equations obtained coincide with the equations of elastic shells at a Poisson coefficient $\nu = \frac{1}{2}$. Orig. art. has: 57 formulas and 1 figure.

Association: Instytut mekhaniky AN URSR (Institute of Mechanics, AN Ukr-SSR)

Card 1

L 8835-65 EWT(d)/EWT(m)/EWA(d)/EWP(k)/EWA(h)/EWP(r) Pf-4 ASD(f) EM
 ACCESSION NR: AP4023369 S/0198/64/010/002/0205/0215

AUTHOR: Khoma, I. Yu. (Kiev)

TITLE: The elastic-plastic problem for a shallow spherical shell B

SOURCE: Prykladna mekhanika, v. 10, no. 2, 1964, 205-215

TOPIC TAGS: shell, spherical shell, shallow spherical shell, plastic shell deformation; hole weakened shell

ABSTRACT: The author examines the problem of determining the plastic zone or the interface between the elastic and plastic zones in a shallow spherical shell weakened by a circular hole under uniform internal pressure. The averaged deformation intensity over the shell thickness is used, and in the plastic region (around the hole) the Mises plasticity condition in terms of forces and moments is applied. The equilibrium equation obtained is then solved by the method of successive approximation. The radius of the plastic region is found by establishing the relation between the radius and the corresponding internal pressure for several values of the radius; the radius for the given pressure is then determined by interpolation. A numerical example is given for the case when a single shear force is acting at the edge of the hole. Orig. art. has: 54 formulas and 1 figure.

Card 1/2

L 8835-65

ACCESSION NR: AP4023369

ASSOCIATION: Instytut mekhaniky* AN URSR (Institute of Mechanics, AN URSR) (33)

SUBMITTED: 27Jul63

ATD PRESS: 3106

ENCL: 00

SUB CODE: AS

NO REF SOV: 011

OTHER: 000

Card 2/2

KHOMA, A. M.

"Artificial Pneumothorax and Antibacterial Preparations in the Treatment of Children and Adolescents Suffering from Progressive Forms of Pulmonary Tuberculosis." L'vov State Medical Inst., L'vov, 1955. (Dissertation for the Degree of Candidate in Medical Sciences)

SO: Knizhnaya Letopis', No. 22, 1955, pp 93-105

KHOMA-LEMISHKO, A.M.

Examination of the cerebrospinal fluid with a normal admixture
of blood. Lab.delo no.3.26 My-Je '55. (MLRA 8:8)

(CEREBROSPINAL FLUID,
exam., with normal admixture of blood)
(BLOOD,
in CSF, eff. on exam.)

USSR/Medicine

FD-2429

Card 1/2 Pub 17-12/21

Author : Khoma, A. M.

Title : ~~XXXXXXXXXXXX~~
PAS content in a "collaborating" [collapsed] lung and in other organs in experimental tuberculosis

Periodical : Byul. eksp. biol. i med. 39, 1, 46-47, Jan 1955

Abstract : No data can be found in literature on the distribution of PAS in blood, lungs, and other organs of tubercular animals, neither is the concentration of it in the collapsed or atelectic lung known. Author used unilateral insufflation of air into the pleural cavity and intravenous injection of 0.2 g/kg of a 10% solution of PAS. After 1-4 hours the rabbit was examined. The free PAS content was studied colorimetrically by the Ragats method. Comparison showed that presence of PAS in blood, lungs, liver, and kidneys was considerably higher in the tubercular animals than in the healthy controls. This may possibly be explained by a change in the relationship between the protein fractions of the blood. The PAS

Card 2/2

FD-2429

concentration was also higher in healthy and infected animals whose lungs had been collapsed by a gas bubble, than in animals whose lungs were not collapsed. No references. Graphs.

Institution: L'vov Scientific Research Institute for Tuberculosis (Director, G. I. Chemeris)

Submitted : May 20, 1954

Country	: USSR
Category	: Microbiology-Antibiosis and Symbiosis. Antibiotics
Abs. Jour	: Ref Zhur - Biol., No.19, 1958, 35022
Author	: Khoma-Lemishko, A.M.
Institut.	: -
Title	: Variability of the Agent of Tuberculosis in Patients Treated with Antibacterial Preparations
Orig Pub.	: Sb.: Vopr. Terapii i Funktsion. Issled. pri Tuberkuleze. L'vov, 1957, 103-114
Abstract	: In the process of antibiotic therapy of tuberculous patients, there is observed a change in the morphology of the agent and its cultural characteristics. It was established that bacilli isolated from patients from the sputum and from cavities are characterized by uniform resistance to the preparation used. In other portions of the lungs the mycobacteria may retain their sensitivity to the latter. Bacilli with loss of sensitivity to phthivaside also lose, in the majority of cases, their catalase activity. - V.G.Petrovskaya
Card:	1/1

-23-

... of the tubercle bacilli (TB) was determined to streptomycin + PASA, phtivazide + PASA, and to streptomycin + phtivazide + PASA, and parallelly to each preparation separately. It is noted that in most

COUNTRY :
CATEGORY :

ABS. JOUR. :

AUTHOR :
INST. :
TITLE :

No. 14940

ORIG. PUB. :

ABSTRACT : cases TB, which are resistant to one or two
preparations, remain sensitive to their com-
bination. With the combined action of the
preparations a smaller dosage is required to
arrest growth of the TB.

CARD: 2/2

Khoma-Lemishko, A.M.

USSR / Microbiology. Microbes Pathogenic to Humans and Animals.

F-3

Abs Jour : Ref Zhur - Biol No 2 1958 No 5275

Author : ~~Khoma-Lemishko, A.M.~~

* Inst : ~~Inst. of Microbiology~~

Title : On the Problems of Medicinal Resistance of Tuberculosis Stimulant

Orig Pub : Sov. meditsina 1957 No 3, 48-51

Abstract : A study was conducted on sensitivity of tubercular bacilli (TB) to different preparations on 150 patients with lung tuberculosis who were treated by streptomycin, phthivazide and PASA [p-amino salicylic acid]. It was established that 53.3% of TB was resistant and that the majority of strains is resistant to one preparation. Most frequently TB is resistant to streptomycin and phthivazide and rarely to PASA. Resistance of TB isolated from some patients before the beginning of treatment indicates the great epidemiologic hazard of the spread of resistant forms.

Card : 1/1 *

1. Is L'vovskogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. G.I.Chemeris, nauchnyy rukovoditel' - prof. I.T.Stukalo).